

AMENDMENTS TO THE CLAIMS

Listing of Claims:

Claim 1 (Original): A multifunctional cable comprising;
electric cords, a image signal cord and one or more control cords to transfer signals of sounds, supersonic waves, temperature information or control orders with individual inner coats; and
exterior of these cords are molded or filled with flexible and durable molding resin or fibers, and the other surface of the cable is covered with an abrasion resistant coat.

Claim 2 (Previously presented): The multifunctional cable according to claim 1 wherein the electric cords are tin plated copper lines and wherein the inner coat material of the electric cords is polyethylene or polypropylene; wherein the inner line is silver plated copper line and wherein the outer line of the image signal cord and control cord are tin plated copper lines and wherein the inner coat material of the image signal cord and control are Teflon; wherein the molding resin is Kevlar fibers or carbon resin; and wherein the abrasion-resist exterior coat material is polyethylene or polypropylene.

Claim 3 (Original): The multifunctional cable according to claim 1, wherein the diameter of the electric cords is different from the diameter of the image signal cord and control cord.

Claim 4 (Previously presented): The multifunctional cable according to claim 3, wherein the diameter of electric cord is 0.306 millimeters (mm), the diameters of the image signal cord and the control cord are 0.12 mm, and the diameter of the whole multifunctional cable is less than 1.5 mm.

Claim 5 (Original): A multifunctional cable comprising;
electric cords and a image signal cord with individual inner coats; and
exterior of these cords are molded or filled with flexible and durable molding resin or fibers, and the outer surface of the cable is covered with an abrasion resistant coat.

Claim 6 (Previously presented): The multifunctional cable according to claim 5 wherein the lines of the electric cords are tin plated copper lines and wherein the inner coat material of the electric cords is polyethylene or polypropylene; wherein the inner line is silver plated copper line and wherein the outer line of the image signal cord is tin plated copper line and wherein the inner coat material of the image signal cord is Teflon; wherein the molding resin is Kevlar fibers or carbon resin; and wherein the abrasion-resist exterior coat material is polyethylene or polypropylene.

Claim 7 (Previously presented): fishing equipment with video system comprising:
a multifunctional cable comprising;
electric cords, a image signal cord and one or more control cords to transfer signals of sounds, supersonic waves, temperature information or control orders with individual inner coats; and

exterior of these cords are molded or filled with flexible and durable molding resin or fibers, and the outer surface of the cable is covered with an abrasion resistant coat;

a photographing part composed of a weight connected to one end of said multifunctional cable, having a built-in camera and one or more control devices selected from supersonic wave sensor, digital temperature sensor, underwater mike, pressure sensor, vibrating motor, geomagnetic sensor and camera angle adjustor and several tying rings for the fishhook are formed; and a buoyancy regulating float connected to a point of said multifunctional cable;

an external device part connected to the other end of said multifunctional cable, and comprised of a display panel which receives and displays various signals including image signals from said photographing part through said multifunctional cable, a controller communicating to the control devices through the multifunctional cable and controls them by exchanging control signals through the multifunctional cable, and an electric power supplier which supplies power to the above photographing part, display panel and controller.

Claim 8 (Previously presented): fishing equipment with video system comprising:
a photographing part composed of a weight connected to one end of a multifunctional cable having a built-in camera, one or more control devices selected from supersonic wave sensor, digital temperature sensor, underwater mike, pressure sensor, vibrating motor,

geomagnetic sensor and camera angle adjustor, several tying rings for the fishhook are formed, and a wireless radio sending/receiving float connected to said weight through said multifunctional cable and including a first radio sending/receiving circuit having an electric power supplier inside; and

an external device part comprised of a second radio sending/receiving circuit exchanging signals with the first radio sending/receiving circuit; a display panel connected to the second radio sending/receiving circuit, and receives and displays various signals including image signals received by the second sending/receiving circuit from said photographing part; a controller connected to the second radio sending/receiving circuit and controls the control devices by exchanging control signals through the second radio sending/receiving circuit; and an electric power supplier which supplies power to the second radio sending/receiving circuit, display panel and controller;

wherein the multifunctional cable comprises:

electric cords, a image signal cord and one or more control cords to transfer signals of sounds, supersonic waves, temperature information or control orders with individual inner coats; and

exterior of these cords are molded or filled with flexible and durable molding resin or fibers, and the outer surface of the cable is covered with an abrasion resistant coat.

Claim 9 (Previously presented): fishing equipment with video system comprising:
a multifunctional cable comprising:

electric cords, a image signal cord and one or more control cords to transfer signals of sounds, supersonic waves, temperature information or control orders with individual inner coats; and

exterior of these cords are molded or filled with flexible and durable molding resin or fibers, and the outer surface of the cable is covered with an abrasion resistant coat;

a photographing part comprised of a weight connected to one end of said multifunctional cable, having a built-in camera and one or more control devices selected from supersonic wave sensor, digital temperature sensor, underwater mike, pressure sensor, vibrating motor, geomagnetic sensor and camera angle adjustor, several tying rings for the fishhook are formed; and a buoyancy regulating float connected to a point of said multifunctional cable;

a wireless transceiver connected to the other end of said multifunctional cable, having a first radio sending/receiving circuit with an electric power supplier inside and fixable to a point outside the water; and

an external device part comprised of a second radio sending/receiving circuit exchanging signals with the first radio sending/receiving circuit; a display panel connected to the second radio sending/receiving circuit, and receives and displays various signals including image signals received by the second radio sending/receiving circuit from said photographing part; a controller connected to the second radio sending/receiving circuit, and controls the control devices by exchanging control signals through the second radio sending/receiving circuit, and controls the display panel; and an electric power supplier which supplies power to the second radio sending/receiving circuit, display panel and controller.

Claim 10 (Original): The fishing equipment with video system according to claim 9, wherein the wireless receiver is fixed at a point of grip part of the fishing pole.

Claim 11 (Previously presented): The fishing equipment with video system according to claim 7, further comprising a fishing pole with an inlet hole and an outlet hole at both end parts of the fishing pole respectively, so that the multifunctional cable can pass through the fishing pole.

Claim 12 (Previously presented): The fishing equipment with video system according to claim 7, further comprising a connector which connects cut ends of the multifunctional cable between said weight of the photographing part and the float, so that the user can change the weight of the photographing part easily.

Claim 13 (Previously presented): The fishing equipment with video system according to claim 7, wherein the case of said weight of the photographing part is known lure shape, and a built-in camera is built inside the lure.

Claim 14 (Previously presented): The fishing equipment with video system according to claim 7, wherein the case of said weight of the photographing part is bisected case shape,

which has a hinge on one side and a fixing flange on the other side of the bisected case, so that said bisected case can be integrated and disintegrated using fixing bolts.

Claim 15 (Previously presented): The fishing equipment with video system according to claim 7, wherein the bottom part of said weight is filled with materials of high density, the middle part has a built-in camera and control devices, and the upper part has a void, so that said weight always stand stably under the water.

Claim 16 (Previously presented): The fishing equipment with video system according to claim 7, further comprising certain length of flexible tube or a thin wire on the weight, so that the user can control the location of the fishhook and shooting angle of the camera.

Claim 17 (Previously presented): The fishing equipment with video system according to claim 7, wherein the camera angle adjustor is constructed by installing the rectangular shaped fixture driven by a motor in the weight so as to place each end of said fixture at each end of the weight case on the upper part of the weight, so that the camera angle is adjustable to any angle by driving said fixture through controlling the rotating direction of the motor by using the controller of the external device part.

Claim 18 (Previously presented): The fishing equipment with video system according to claim 7, further comprising a underwater float at a point of the multifunctional cable connecting the weight and the buoyancy regulating float or the wireless radio sending/receiving float, and one or more supplementing weight hung to the ring attached to the bottom of the weight case, so as to prevent the weight from fluctuating under the water and help to regulate the density of the weight.

Claim 19 (Previously presented): The fishing equipment with video system according to claim 7, wherein the display panel, controller and electric power supplier of the external device part is constructed by adding a connector to connect with the end of the multifunctional cable or installing a radio sending/receiving circuit which exchange signals such an image signal with the wireless radio sending/receiving float of the photographing part or the wireless transceiver inside, to a known mobile phone with power and supply unit, display unit, input unit, image storage unit and control unit.

Claim 20 (Previously presented): An underwater image video system comprising:
a multifunctional cable comprising:

electric cords, a image signal cord and one or more control cords to transfer signals of sounds, supersonic waves, temperature information or control orders with individual inner coats; and

exterior of these cords are molded or filled with flexible and durable molding resin or fibers, and the outer surface of the cable is covered with an abrasion resistant coat;

a photographing part comprised of a photographing device connected to one end of the multifunctional cable, having a built-in camera and one or more control device selected from supersonic wave sensor, digital temperature sensor, underwater mike, pressure sensor, geomagnetic sensor and camera angle adjustor inside; a diver's location indicating buoy connected to a point of said multifunctional cable; and a winding reel used to control the length of the multifunctional cable between the buoy and the photographing device according to the distance between the water surface and the diver;

an external device part connected to the other end of the above multifunctional cable and comprised of a display panel which receives and displays various signals including image signals from the photographing part through the multifunctional cable, a controller communicating with the control devices through the multifunctional cable and controls the control devices by exchanging control signals through the multifunctional cable, and an electric power supplier which supplies power to the above photographing part, display panel and controller.

Claim 21 (Previously presented): An underwater image video system comprising:

a photographing part comprised of a photographing device connected to one end of the a multifunctional cable, having a built-in camera and one or more control devices selected from supersonic wave sensor, digital temperature sensor, underwater mike, pressure sensor, geomagnetic sensor and camera angle adjustor inside, a diver's location indicating buoy connected to the other end of the above multifunctional cable, having a first radio sending/receiving circuit inside, and a winding reel used to control the length of the multifunctional cable between the buoy and the photographing device according to the distance between the water surface and the diver;

an external device comprised of a second radio sending/receiving circuit exchanging signals with the first radio sending/receiving circuit; a display panel connected to the second

radio sending/receiving circuit and receives and displays various signals including image signals received by the second radio sending/receiving circuit from the photographing part; a controller connected to the second radio sending/receiving circuit and controls the control devices by exchanging control signals through the second radio sending/receiving; and an electric power supplier which supplies power to the second radio sending/receiving circuit, display panel and controller;

wherein the multifunctional cable comprises:

electric cords, a image signal cord and one or more control cords to transfer signals of sounds, supersonic waves, temperature information or control orders with individual inner coats; and

exterior of these cords are molded or filled with flexible and durable molding resin or fibers, and the outer surface of the cable is covered with an abrasion resistant coat.

Claim 22 (Previously presented): The underwater image video system according to claim 20, further comprising a twin lens reflex on the exterior case of said photographing device, composed of a case of each end open and with at least one or more curves, a hinge installed on the curved part of the above case, and a reflector installed on the curved part to reflect the incident ray to a set degree.

Claim 23 (Previously presented): An underwater image video system according to claim 20, wherein the camera angle adjustor is constructed by installing the rectangular shaped fixtures driven by a motor in the photographing device so as to place each end of the fixture at each end of the photographing device case on the upper part of the photographing device, so that the camera angle is adjustable to any angle by driving said fixture through controlling the rotating direction of the motor by using the controller of the external device part.

Claim 24 (Previously presented): The underwater image video system according to claim 20, wherein the display panel, controller and electric power supplier of the external device part is constructed by adding a connector to connect with the end of the multifunctional cable or installing a radio sending/receiving circuit which exchange signals such as image signals as image signal with the wireless radio sending/receiving circuit built

in the buoy of the photographing part, to a known mobile phone with power supply unit, display unit, input unit, image storage unit and control unit.

Claim 25 (Previously presented): The fishing equipment with video system according to claim 8, further comprising a fishing pole with an inlet hole and an outlet hole at both end parts of the fishing pole respectively, so that the multifunctional cable can pass through the fishing pole.

Claim 26 (Previously presented): The fishing equipment with video system according to claim 9, further comprising a fishing pole with an inlet hole and an outlet hole at both end parts of the fishing pole respectively, so that the multifunctional cable can pass through the fishing pole.

Claim 27 (Previously presented): The underwater image video system according to claim 21, further comprising a twin lens reflex on the exterior case of said photographing device, composed of a case of each end open and with at least one or more curves, a hinge installed on the curved part of the above case, and a reflector installed on the curved part to reflect the incident ray to a set degree.

Claim 28 (Previously presented): An underwater image video system according to claim 21, wherein the camera angle adjustor is constructed by installing a rectangular shaped fixtures driven by a motor in the photographing device so as to place each end of the fixture at each end of the photographing device case on the upper part of the photographing device, so that the camera angle is adjustable to any angle by driving said fixture through controlling the rotating direction of the motor by using the controller of the external device part.

Claim 29 (Previously presented): The underwater image video system according to claim 21, wherein the display panel, controller and electric power supplier of the external device part is constructed by adding a connector to connect with the end of the multifunctional cable or installing a radio sending/receiving circuit built in the buoy of the photographing part, to a known mobile phone with power supply unit, display unit, input unit, image storage unit and control unit.

Claim 30 (New): A weight for the fishing equipment with video system comprising a lure shaped outer case and a built-in camera inside the lure shape case.

Claim 31 (New): The weight for the fishing equipment with video system according to claim 30, further comprising one or more control devices selected from supersonic wave sensor, digital temperature sensor, underwater mike, pressure sensor, vibrating motor, geomagnetic sensor and camera angle adjustor.

Claim 32 (New): The weight for the fishing equipment with video system according to claim 30, further comprising certain length of flexible tube or a thing wire on the lure shaped case, so that the user can control the location of the fishhook and shooting angle of the camera.

Claim 33 (New): The weight for the fishing equipment with video system according to claim 30, further comprising one or more illuminators such as a high luminance illuminating diode or a infrared light.

Claim 34 (New): The weight for the fishing equipment with video system according to claim 30, wherein the bottom part of the case is filled with materials of high density, the middle part has a built in camera, and the upper part has a void.